

# IEEE Region 10 Symposium (TENSYMP 2022)

## July 1-3, 2022, VMCC, IIT Bombay, INDIA

### Conference Program

#### Day 1: July 1, 2022

Time (IST)	Mode	Activity
08:00 - 09:00	Offline	Registration & Welcome
09:00 - 09:30	Hybrid	Inauguration
09:30 - 10:15	Hybrid	Keynote Talk (Inaugural)
10:15 - 10:30		High Tea
10:30 - 11:00	Hybrid	Parallel Track Invited Talks (IT1/IT2)
11:00 - 13:00	Hybrid	Parallel Technical Sessions (TS1/TS6/TS9/TS15/TS23)
13:00 - 14:00		Lunch
14:00 - 14:30	Hybrid	Parallel Track Invited Talks (IT3/IT4)
14:30 - 16:30	Hybrid	Parallel Technical Sessions (TS2/TS11/TS16/TS20/TS24)
16:30 - 16:45		Tea
16:30 - 18:30	Hybrid	Industry Session (MathWorks Workshop)

#### Day 2: July 2, 2022

Time (IST)	Mode	Activity
09:00 - 11:00	Hybrid	Parallel Special (SS1/SS4/SS5) & Physical Poster (PP1) Sessions
11:00 - 11:15		Tea
11:15 - 13:15	Hybrid	Parallel Technical (TS3/TS7/TS10/ TS18/TS25) & Virtual Poster (VP1) Sessions
13:15 - 14:00		Lunch
14:00 - 14:30	Hybrid	Parallel Track Invited Talks (IT5/IT6)
14:30 - 16:30	Hybrid	Parallel Technical (TS4/TS12/TS17/TS21/TS26) & Virtual Poster (VP2) Sessions
16:30 - 16:45		Tea
16:45 - 17:30	Hybrid	Keynote Talk (Evening Talk)
17:30 - 19:30	Hybrid	Parallel Special (SS2/SS3/SS6) & Physical Poster (PP2) Sessions
20:00 - 22:00		Gala dinner

#### Day 3: July 3, 2022

Time (IST)	Mode	Activity
09:30 - 10:15	Hybrid	Keynote Talk (Virtual)
10:15 - 10:45		Parallel Track Invited Talks (IT7/IT8)
10:45 - 11:00	Hybrid	Tea
11:00 - 13:00	Hybrid	Parallel Technical Sessions (TS5/TS8/TS14/TS19/TS27)
13:00 - 13:45		Lunch
13:45 - 14:30	Hybrid	Track Invited Talk (IT9) & R10 IRC Session (IT10)
14:30 - 16:30	Hybrid	Parallel Technical Sessions (TS13/TS22/TS28/TS29)
16:30 - 16:45		Tea
16:45 - 17:30	Hybrid	Keynote Talk (Concluding)
17:30 - 18:00	Hybrid	Valedictory Session, Awards and Unveiling of new logo of Bombay Section

## A. Technical Sessions Details for Oral Presentation

TS 1: AI and Blockchain Paradigms for the Changing World				
Sn.	Paper ID	Paper Title	Corresponding Author	Registered Author
1.	1570789035	Effect of Imbalance Data Handling Techniques to Improve the Accuracy of Heart Disease Prediction Using Machine Learning and Deep Learning	Abdus Sahid (Hajee Mohammad Danesh Science and Technology University, Bangladesh)	Mahmudul Hasan (Hajee Mohammad Danesh Science and Technology University, Dinajpur, Bangladesh)
2.	1570789058	A Review on Prediction of Crop Yield Using Machine Learning Techniques	Sunil GI (Sai Vidya Institute of Technology & Acharya Institute of Technology, India)	Sunil GI (Sai Vidya Institute of Technology & Acharya Institute of Technology, India)
3.	1570789228	A Machine Learning Approach for Predicting Patient's Length of Hospital Stay with Random Forest Regression	Sayma Alam Suha (Bangladesh University of Engineering and Technology, Bangladesh)	Sayma Alam Suha (Bangladesh University of Engineering and Technology, Bangladesh)
4.	1570789242	Statistical Feature Rich Deep Learning Based Epileptic Seizure Detection	Poojan Dalal (Sarvajanik College of Engineering and Technology, Surat, India)	Poojan Dalal (Sarvajanik College of Engineering and Technology, Surat, India)
5.	1570794908	Supervised Learning Based Mobile Network Anomaly Detection from Key Performance Indicator (KPI) Data	Md. Rakibul Ahasan (Brac University, Bangladesh)	Md. Rakibul Ahasan (Brac University, Bangladesh)
6.	1570794913	Blockchain-Based Attendance Management and Payroll System Using Hyperledger Composer Framework	Delphi Hanggoro (University of Indonesia, Indonesia)	Delphi Hanggoro (University of Indonesia, Indonesia)

7.	1570795014	Blockchain Trust Impact in Agribusiness Supply Chain: A Survey, Challenges, and Directions	Norshakinah Md Nasir (University Utara Malaysia & InterNetWorks Research Lab, Malaysia)	Norshakinah Md Nasir (University Utara Malaysia & InterNetWorks Research Lab, Malaysia)
8.	1570795097	Early Prediction of Crop Yield in India Using Machine Learning	Ankita Sharma (IIIT, Naya Raipur, Chhattisgarh, India)	Dr. N. Srinivas Naik, Sourajita Dewasi, Anushtha Tamrakar, Ankita Sharma (IIIT, Naya Raipur, Chhattisgarh, India)
9.	1570795121	Performance Evaluation of Navigation Schemes for Autonomous Exploration of a Secondary Explorer Rover in a Martian Lava Cave	Antar Mazumder (Rajshahi University of Engineering and Technology (RUET), Bangladesh)	Faisal Rahman Badal (Rajshahi University of Engineering and Technology (RUET), Bangladesh)

**TS 2: AI and Blockchain Paradigms for the changing world**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570795398	Evaluation of Cryptocurrency Coins with Machine Learning Algorithms and Blockchain Technology	Leenata J Parab (Pillai's College of Engineering, New Panvel, India)	Leenata Jaymin Parab (Pillai's College of Engineering, New Panvel, India)
2.	1570795446	Recognizing Students' Attention in a Virtual Class Through Facial Expressions Using Machine Vision	Sneha Bhatia (Mapua University & None, Philippines)	Sneha Bhatia (Mapua University & None, Philippines)
3.	1570795448	Deep Learning Based Real-Time Fusion of Day and Thermal Videos	Rohan Sada (PES University, India)	Rohan Sada (PES University, India)
4.	1570795457	Parent Coin Based Cryptocurrency Price Prediction Using Regression Techniques	Aravindan Jg (VIT Chennai, India)	ARAVINDAN JG, Sankara Rama Krishnan V (VIT Chennai, India)
5.	1570795556	A Survey of Recent Deep Learning Algorithms Used in Smart Farming	Lavika Goel (MNIT Jaipur, India)	Aishwarya Mishra (MNIT Jaipur, India)
6.	1570796271	Privacy Preserving Contact Tracing Using Ethereum Blockchain Network	Rachit Goel (ABV-IIITM Gwalior, India)	Rachit Goel (ABV-IIITM Gwalior, India)
7.	1570796365	Study of Different Types of Evaluation Methods in Classification and Regression	Snehal A. Gadge (University of Mumbai, India)	Snehal Ashok Gadge (University of Mumbai, India)
8.	1570798108	Performance Comparison of Deep Spiking CNN with Artificial Deep CNN for Image Classification Tasks	Mandar N Kalbande (Visvesvaraya National Institute of Technology, Nagpur, India)	Punitkumar Bhavsar (Visvesvaraya National Institute of Technology, Nagpur, India)

**TS 3: AI and Blockchain Paradigms for the Changing World**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570798656	Molecular-InChI: Automated Recognition of Optical Chemical Structure	Nitin Kumar (National Institute of Technology, Karnataka, India)	Nitin Kumar (National Institute of Technology, Karnataka, India)
2.	1570798783	FedPruNet: Federated Learning Using Pruning Neural Network	Gowtham L (National Institute of Technology Karnataka, Surathkal, India)	GOWTHAM L (National Institute of Technology Karnataka, Surathkal, India)
3.	1570798929	Stock Analyzer and Bot Using Machine Learning	Chintan Jethva (Vivekanand Education Society's Institute of Technology, India)	Saachi Dudani (Vivekanand Education Society's Institute of Technology, India)
4.	1570798978	Predictive Analysis of Polycystic Ovarian Syndrome Using CatBoost Algorithm	Yash M Rathod (Vidyalankar Institute of Technology, India)	Yash Rathod (Vidyalankar Institute of Technology, India)
5.	1570798980	SAU-NET: Scale Aware Polyp Segmentation Using Encoder-Decoder Network	Anmol Gautam (National Institute of Technology Meghalaya, India)	Anmol Gautam, Suchana Das (National Institute of Technology Meghalaya, India)
6.	1570798997	Convolutional Neural Network (CNN) in COVID-19 Detection: A Case Study with Chest CT Scan Images	Khandaker Nusaiba Hafiz (University of California, Riverside, USA)	Khandaker Nusaiba Hafiz (University of California, Riverside, USA)
7.	1570799031	Early Glaucoma Detection Using Machine Learning Algorithms of VGG-16 and ResNet-50	Parag Jibhakate (Rashtrasant Tukadoji Maharaj Nagpur University, India)	Kanchan Dhote (Shri Ramdeobaba College of Engineering and Management ,Nagpur)

**TS 4: AI and Blockchain Paradigms for the Changing World**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570799058	Identification and Analysis of Breast Cancer Disease Using Swarm and Evolutionary Algorithm	Gyanaranjan Shial (Sambalpur University & VSSUT Burla, India)	GYANARANJAN SHIAL (Sambalpur University & VSSUT Burla, India)
2.	1570799078	Helmet Detection and Number Plate Recognition Using Deep Learning	Aditi Rao (University of Mumbai, India)	Aditi Rao (University of Mumbai, India)
3.	1570799101	A Combined Approach of Empirical Wavelet Transform and Artificial Neural Network Based High Impedance Fault Classification in Micro-Grid System	Tapaswini Biswal (KIIT DU & Indian Institute of Technology, Patna, Bihar, India)	Tapaswini Biswal (KIIT DU & Indian Institute of Technology, Patna, Bihar, India)
4.	1570799118	Blockchain for EHR: An Off-Chain Based Approach	Anshika Gupta (University of Mumbai, India)	Anshika Gupta (University of Mumbai, India)
5.	1570799947	Hate Speech Classification Implementing NLP and CNN with Machine Learning Algorithm Through Interpretable Explainable AI	Mahmudul Hasan Shakil (BRAC University, Bangladesh)	Mahmudul Hasan Shakil (BRAC University, Bangladesh)
6.	1570800918	Detection of Cardiac Arrhythmia Using Machine Learning Approaches	Jaidev Chittoria (National Institute of Technology Karnataka, Surathkal, India)	Jaidev Chittoria (National Institute of Technology Karnataka, Surathkal, India)
7.	1570801170	Various Disease Predictions Using Machine Learning	Abhimanyu Barun (Delhi Technological University (DTU), India)	MAYANK KUMAR JARWAL (Delhi Technological University (DTU), India)
8.	1570801278	GROUP: Global RObUst and Privacy Preserved Model for Diabetes Prediction	Ashlesha Hota (CIT Kokrajhar, India)	Ashlesha Hota (CIT Kokrajhar, India)

**TS 5: AI and Blockchain Paradigms for the Changing World**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570801606	A Study of Light Intensity of Stars for Exoplanet Detection Using Machine Learning	Vedant Bahel (G H Raisoni College of Engineering, Nagpur, India)	Vedant R Bahel (G H Raisoni College of Engineering, Nagpur, India)
2.	1570801619	DeCS: A Deep Neural Network Framework for Cold Start Problem in Recommender Systems	Rudraprasad Mondal (NIT Karnataka, India)	Rudraprasad Mondal (NIT Karnataka, India)
3.	1570801723	Identifying Deepfake Faces with ResNet50-Keras Using Amazon EC2 DL1 Instances Powered by Gaudi Accelerators from Habana Labs	Saket S Pradhan (University of Mumbai, India)	Saket Sameer Pradhan (University of Mumbai, India)
4.	1570801727	Boosting K-Nearest Neighbour (KNN) Classification Using Clustering and AdaBoost Methods	Dewan Md. Farid (United International University, Bangladesh)	Dewan Md. Farid (United International University, Bangladesh)
5.	1570801731	A Universal Domain Name Resolution Service - Need and Challenges - Study on Blockchain Based Naming Services	Balaji Rajendran (Centre for Development of Advanced Computing, India)	Dr. Balaji Rajendran (Centre for Development of Advanced Computing, India)
6.	1570801741	PyTorch Implementation and Assessment of Pre-Trained Convolutional Neural Networks for Tomato Leaf Disease Classification	Lohith R (REVA University, India)	Lohith R. (REVA University, India)
7.	1570795543	A Novel Approach on Machine Learning Based Data Warehousing for Intelligent Healthcare Services	Nazmus Sakib (Ahsanullah University of Science & Technology, Bangladesh)	NAZMUS SAKIB (Ahsanullah University of Science & Technology, Bangladesh)

**TS 6: Antenna, Microwave and RF Engineering**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570785799	Efficient Usage of Energy in 5G Toward Sustainable Development Inclined to Industry 4.0 Connectivity	Devasis Pradhan (Acarya Institute of Technology & Acharya Institute of Technology, Bangalore, India)	HLA MYO TUN (Yangon Technological University)
2.	1570787686	PoD Vs SNR Estimation: C-MIMO Radar Using STC and STAP Algorithm	Harsh Wardhan Singh (Vyomastra Technologies LLP, Bengaluru, India)	Harsh Wardhan Singh (Vyomastra Technologies LLP, Bengaluru, India)
3.	1570787870	Band Notched Triband Patch Antenna Incorporating a Modified Complementary Split Ring Resonator	Shailesh M Rao (REVA University, Bengaluru, India)	SHAILESH M RAO (REVA University, Bengaluru, India)
4.	1570789288	Radiation Pattern Reconfigurable MIMO Antenna with Practical DC Bias Network	Jaya Bharath (University Malaysia Perlis, Malaysia)	Jaya Bharath (University Malaysia Perlis, Malaysia)
5.	1570791994	Microstrip Filtering Antenna with Increased Out of Selectivity Using Dual Ring Patches	Rakesh A (Vardhaman College of Engineering, India)	Samuel Nishant Muthyala (Vardhaman College of Engineering, India)
6.	1570792410	A Review on Deep Learning Algorithms for Large Intelligent Surfaces in Next Generation Wireless Systems	Jai Desai (Sinhgad College of Engineering, Pune & Assistant Professor, India)	Jai Desai (Sinhgad College of Engineering, Pune & Assistant Professor, India)
7.	1570795333	Implementation of GSM and LTE Re-Configurable Cellular System Using USRP B200	Sayed Ahmed Tasin (United International University (UIU), Bangladesh)	AKM Muzahidul Islam (UNITED INTERNATIONAL UNIVERSITY (UIU))



**TS 7: Antenna, Microwave and RF Engineering**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570795526	Interference Issues in LoRaWAN: A Comparative Study Using Simulator and Analytical Model	Md. Rakibul Islam (Shahjalal University of Science and Technology, Bangladesh)	Md. Rakibul Islam (Shahjalal University of Science and Technology, Bangladesh)
2.	1570795610	Comparison of LQG and ADRC Based Wind Disturbance Rejection Schemes for Deep Space Antenna	Vishwa Pal Singh (Sardar Vallabhbhai National Institute of Technology, Surat)	Vishwa Pal Singh (Sardar Vallabhbhai National Institute of Technology, Surat)
3.	1570798143	Design of a Dual Band Monolayer Metasurface Based Bandpass Filter	Hitesh Sanjay Badgujar (University of Mumbai & Don Bosco Institute of Technology, India)	Hitesh Badgujar (University of Mumbai & Don Bosco Institute of Technology, India)
4.	1570798400	A Wide Scanning Method for a Flexible Conformal Antenna Array with Mutual Coupling Effects	Yizhen Jia (University of Electronic Science and Technology of China, China)	Wen-Qin Wang (University of Electronic Science and Technology of China)
5.	1570798647	Effect of Parasitic Element on Multiband CPW-Fed NB-IoT Antenna Development for Low-Power Wide-Area Network	Md Shakhawat Hossen (Rajshahi University of Engineering & Technology, Bangladesh)	Md Ibrahim (Rajshahi University of Engineering & Technology, Bangladesh)
6.	1570798679	Design and Comparison of Semi-Ellipsoidal and Conical Phased Array Applicators Operating at 434 MHz for Hyperthermia Treatment of Locally Advanced Breast Cancer	Rahul Choudhary (Indian Institute of Technology Madras, India)	Rahul Choudhary (Indian Institute of Technology Madras, India)
7.	1570801848	Low-Cost Gain Switchable Antenna System for 5G Smartphones	Esha Goel (Shiv Nadar University, India)	Esha Goel (Shiv Nadar University, India)

**TS 8: Antenna, Microwave and RF Engineering**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570798912	Design of near Field Magnetic Probe for Monitoring Wire Electrical Discharge Machining Process	Kishor Kumar Kachari (Indian Institute of Technology Madras, India)	Kishor Kumar Kachari (Indian Institute of Technology Madras, India)
2.	1570799936	Revisiting Halfwave Wire Dipole and Some of Its Arrays	Erwin B Daculan (University of San Carlos, Philippines)	Erwin B Daculan (University of San Carlos, Philippines)
3.	1570801396	Development and Experimental Characterization of Aluminum-Based DRHA with Quadratic Ridge Profile	Folin Oktafiani (Lembaga Ilmu Pengetahuan Indonesia, Indonesia)	Folin Oktafiani (Lembaga Ilmu Pengetahuan Indonesia, Indonesia)
4.	1570801449	SmartCORS: An Embedded System-Based Cost-Effective and Intelligent Continuously Operating Reference Station to Support Long Term Mapping and Surveying Application in the Philippines	Angelica Thea O Parayno (Mapua University, Philippines)	Angelica Thea O Parayno (Mapua University, Philippines)
5.	1570801709	Design and Analysis of a Compact Metasurface Based Filter for Broadband Performance	Sadanand Chauhan (Don Bosco Institute of Technology, Mumbai, India)	Sadanand Chauhan (Don Bosco Institute of Technology, Mumbai, India)
6.	1570797073	Dual Element MIMO Antenna with Improved Radiation Efficiency for 5G Millimeter-Wave Applications	Ajit Kumar Singh IIIT RANCHI, India	Ajit Kumar Singh IIIT RANCHI, India
7.	1570797582	<i>Radar Cross Section(RCS) Reduction of Microstrip Patch Antenna Using Meander Structures</i>	Jisha MV	Jisha MV

**TS 9: Humanitarian and Social Impacts of Technologies**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570780794	Technology in a Fight Against COVID-19	Akshada Gaonkar (NMIMS Mukesh Patel School of Technology Management and Engineering, India)	Akshada Gaonkar, Prerit Gupta (NMIMS Mukesh Patel School of Technology Management and Engineering, India)
2.	1570788505	Partial Offloading Schemes for Latency and Computation Sensitive Tasks	Jubaer Ahmad (United International University (UIU), Bangladesh)	Jubaer Ahmad (United International University (UIU), Bangladesh)
3.	1570789339	Multivariate Covid-19 Forecasting with Vaccinations as a Factor: The Case of India and USA	Vibha Masti (PES University, India)	Vibha Masti, Vishruth Nath, Harshith MohanKumar (PES University, India)
4.	1570792353	A Co-Operative Game Theoretical Strategy of Vendor and Buyer in an EPQ Model of Deteriorating Items Under Trade Credit Policy	Suresh Ankur (NIT Agartala, India)	UTTAM KUMAR BERA (National Institute of Technology Agartala)
5.	1570793011	Distributed Adaptive Recommendation & Time-Stamp Based Estimation of Driver-Behaviour	Anamika Satrawala (Malaviya National Institute of Technology Jaipur, India)	Dr. Arka Prokash Mazumdar (Malaviya National Institute of Technology Jaipur, India)
6.	1570794842	Modelling the Nexus of Macro-Economic Variables with WTI Crude Oil Price: A Machine Learning Approach	Vandana Bhagat (Christ University, India)	Anshul Saxena Christ University Lavasa Pune

**TS 10: Humanitarian and Social Impacts of Technologies**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570796022	PCPS: Personalized Care Through Patient Similarity	Sreenivasan M (National Institute of Technology Calicut, India)	M Sreenivasan (National Institute of Technology Calicut, India)
2.	1570799046	Fuzzy Based Geo-Spatial Crime Category Prediction for Crime Mapping and Safe Route Travel	Sagar Sharma (Ramrao Adik Institute of Technology, India)	Purujit Srinivasan (Ramrao Adik Institute of Technology, Nerul, Navi Mumbai)
3.	1570799114	An Approach for Analyzing Cognitive Behavior of Autism Spectrum Disorder Using P300 BCI Data	Nabila Tasnim (Bangladesh University of Engineering and Technology, Bangladesh)	Nabila Tasnim (Bangladesh University of Engineering and Technology, Bangladesh)
4.	1570799125	A Mobility Mechanism to Manage Producer Mobility in Named Data Networking	Ahmad Abrar (Universiti Utara Malaysia, Malaysia)	Ahmad Abrar (Universiti Utara Malaysia, Malaysia)
5.	1570794374	Human vs. Machine Eye for Chart Interpretation	Prerna Mishra (IIITR, India)	Prerna Mishra (IIITR, India)

**TS 11: Low power VLSI devices, Circuits and Systems**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570788974	Successive Cancellation Polar Decoder Implementation Using Processing Elements	Swapnil P. Badar (Shri Sant Gajanan Maharaj College of Engineering, Shegaon, India)	SWAPNIL PANJABRAO BADAR (Shri Sant Gajanan Maharaj College of Engineering, Shegaon, India)
2.	1570789102	An Energy Efficient LIF Neuron Based on Bulk MOSFET with an N+ Buried Layer	Ametha Sri Sai Dhruthi (Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, India)	Ametha Sri Sai Dhruthi (Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, India)
3.	1570789250	Study of Power-Delay Improved Logic Circuit Using Strained Silicon DG-JLT with Variable Gate Work Function	Tika Ram Pokhrel (National Institute of Technology Arunachal Pradesh, India)	Tika Ram Pokhrel (National Institute of Technology Arunachal Pradesh, India)
4.	1570789290	Performance Assessment of Ge-Source Double-Gate PNP TFET Based Biosensor	Karabi Baruah (National Institute of Technology Silchar, India)	Karabi Baruah (National Institute of Technology Silchar, India)
5.	1570789448	Design of Noise Immune Subthreshold Circuits Using Dynamic Threshold Schmitt Trigger Logic	Rajendar Sandiri (Vardhaman College of Engineering, India)	Rajendar Sandiri (Vardhaman College of Engineering, India)
6.	1570789651	Low Power Dadda Multiplier Using Approximate Almost Full Adder and Majority Logic Based Adder Compressors	Ketki Pathak (Sarvajanik College of Engineering & Technology, Gujarat Technological University, India)	KETKI CHINTANKUMAR PATHAK (Sarvajanik College of Engineering & Technology, Gujarat Technological University, India)
7.	1570793873	Reversible QCA Based Full-Adder and Subtractor in Nanotechnology	Pallavi Darji (Dharmsinh Desai University, Nadiad, India)	Pallavi Darji (Dharmsinh Desai University, Nadiad, India)

**TS 12: Low Power VLSI Devices, Circuits and Systems**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570794489	An RC Charging Based Soft-Start Circuit for Voltage Regulators	Saurabh Goyal (NXP Semiconductors, India)	Saurabh Goyal (NXP Semiconductors, India)
2.	1570798974	A Concurrent Testing Scheme for Muller Circuits Using Reduced Ordered Binary Decision Diagram	Pradeep Kumar Biswal (IIIT Bhagalpur, India)	Pradeep Kumar Biswal (IIIT Bhagalpur, India)
3.	1570799043	Hybrid MoCs for Long-Distance On-Chip Communications	Arijit Karali (NIT Karnataka, India)	Arijit Karali (NIT Karnataka, India)
4.	1570799089	Design of High-Pass FIR Filter Using Arithmetic Optimization Algorithm and Its FPGA Implementation	Kaushik Debnath (Jadavpur University, India)	Kaushik Debnath (Jadavpur University, India)
5.	1570801453	Device Reliability Affecting Coding Schemes in Neuromorphic Circuits	Siona Picardo (BITS Pilani Dubai Campus, United Arab Emirates)	Nilesh Goel (BITS Pilani Dubai Campus, United Arab Emirates)

**TS 13: Low power VLSI devices, Circuits and Systems**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570801630	Experimental Performance Analysis of Underwater Optical Wireless Communication Systems	Rajeev Kumar Kottilingal (Indian Institute of Technology Goa, India)	Rajeev Kumar Kottilingal (Indian Institute of Technology Goa, India)
2.	1570801632	Impact of Reliability Issues and Process Variability in Neuromorphic Circuits	Jani Babu Shaik (Shiv Nadar University, India)	Sonal Singhal (Shiv Nadar University, India)
3.	1570801717	Effect of Sidewall Spacers on the Performance of GaAs Based DG-JLMOSFET	Nafisa Ahmed (Military Institute of Science & Technology, Bangladesh)	Nafisa Ahmed (Military Institute of Science & Technology, Bangladesh)
4.	1570801733	Performance Analysis of GaAs DG-JLMOSFET: Impact of Gate Oxide and Its Thickness	Parag Choudhury (Military Institute of Science & Technology, Bangladesh)	Parag Choudhury (Military Institute of Science & Technology, Bangladesh)
5.	1570801734	Low Power and High Precision Analog VLSI Design of 1-D DCT for Real-Time Application	Deepak Kumar (Indian Institute of Engineering Science and Technology, Shibpur, India)	DEEPAK KUMAR, Anirban Ganguly (Indian Institute of Engineering Science and Technology, Shibpur, India)

**TS 14: Novel Education Technologies in the New Normal**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570787102	Interactive Web-Based Image and Graph Analysis Using Sonification for the Blind	Tanumon Roy (National Institute of Technology, Warangal, India)	Tanumon Roy (National Institute of Technology, Warangal, India)
2.	1570799140	Audio Feature Based Monotone Detection and Affect Analysis for Teachers	Ashwin T S (IIT Bombay, India)	Ashwin T S (IIT Bombay, India)
3.	1570799292	Multiple Choice Question Answering Using Attention Based Ranking and Transfer Learning	Namrata Baban Kadam (National Institute of Technology, Surathkal, India)	Namrata Baban Kadam (National Institute of Technology, Surathkal, India)



**TS 15: Photonics Technologies**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570788082	Configuring Logic Operations from New Reversible Toffoli Gate Using Pockel's Effect of Ti: LiNbO3	Shashank Awasthi (National Institute of Technology Arunachal Pradesh, India)	Shashank Awasthi (National Institute of Technology Arunachal Pradesh, India)
2.	1570795132	Group Delay and Dispersion Properties of a Multifunctional, Tunable Optical Reflector Using the Asymmetric Crisscrossed Coupled-Microring Reflector Structure	Avram Gutierrez (Ateneo de Manila University, Philippines)	Avram Gutierrez (Ateneo de Manila University, Philippines)
3.	1570798439	Parametric Optimization of 3D Gold-Graphene Nano-Gratings on Optical Fiber for Ubiquitous Sensing Applications: Mathematical Analysis	Mohammad Mansoor Khan (Indian Institute of Information Technology Guwahati, India)	Mohammad Mansoor Khan (Indian Institute of Information Technology Guwahati, India)
4.	1570798946	Parameters Sensitivity Analysis of the Minimalist-Designed Linearized Optical Frequency Discriminator for Microwave Photonics Link	Benjamin B Dingel (Nasfine Photonics Incorporated)	Joseph, Jr. Tan Placiente (Ateneo de Manila University)
5.	1570799084	Design and Optimization of Photonic Crystal Ring Resonator Based Optical Add-Drop Filter	Hriday Jyoti Borkakati (Indian Institute of Technology Guwahati, India)	Hriday Jyoti Borkakati (Indian Institute of Technology Guwahati, India)
6.	1570799115	Design of Cryogenic Temperature Sensors Using Copper-Coated Fiber Bragg Gratings	Amal Chirayil Soman (Indian Institute of Information Technology, Design and Manufacturing Kancheepuram, India)	Srijith Kanakambaran (IIITDM Kancheepuram)
7.	1570794750	Photonic Multi-Beamforming for Millimeter Wave 5G Downlink Transmission over a	Fekadu Mihret (Indian Institute of Science, Bangalore)	Fekadu Mihret (Indian Institute of Science, Bangalore)

	Single Core Fiber to Remote Antenna Arrays		
--	--	--	--

**TS 16: Power Electronics and Systems**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570787619	A Comprehensive Survey on Hybrid Active Power Filter Topologies & Controller and Application in Microgrid	Akash V. Barva (Pandit Deendayal Petroleum University, India)	Akash V. Barva (Pandit Deendayal Petroleum University, India)
2.	1570788118	Automatic Protection of Electrical and Gas Transmission System on Earthquake	Md. Sohanur Rahnam (American International University- Bangladesh, Bangladesh)	Md sohanur Rahman Sohan, Shaharier Kabir (American International University- Bangladesh, Bangladesh)
3.	1570788700	Use of Machine Learning to Predict Lithium-Ion Cell Voltages During Charging and Discharging	Jeevan Kanesalingam (Motorola Solutions, Malaysia)	SEE FUNG, Jeevan Kanesalingam (Motorola Solutions, Malaysia)
4.	1570788753	Quantized Gradient Multiplier Based Energy Management with Limited Data Communication	Satish Kumar Singh (IIT Gandhinagar, India)	Naran Pindoriya (IIT Gandhinagar, India)
5.	1570789273	A Novel Hybrid Islanding Detection Technique for Optimally Placed DG Units in Microgrid	Shashank Gupta (National Institute of Technology Uttarakhand, India)	Shashank Gupta (National Institute of Technology Uttarakhand, India)
6.	1570792517	Design and Development of Fixed-Off Time Based Flyback Converter	Hemant Kumar (Indian Institute of Technology Jodhpur, India)	Hemant Kumar (Indian Institute of Technology Jodhpur, India)
7.	1570793729	A Soft Switching Boost DC-DC Converter Based on ZVS for Vehicle to Grid Applications with Enhanced Efficiency	Jatin Pratap (Birla Institute of Technology, India)	Jatin Pratap (Birla Institute of Technology, India)
8.	1570793904	Stability Analysis of DC Position Servo System with Interval Time-Varying Delay	Manikandan S (Indian Institute of Information Technology Design and Manufacturing Kancheepuram, India)	Priyanka Kokil (Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram)

**TS 17: Power Electronics and Systems**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570795079	A Modified Zeta Converter Fed with HB-LLC Resonant Converter for Power Factor Correction	Rishita Shukla (Delhi Technological University, India)	Rishita Shukla (Delhi Technological University, India)
2.	1570795485	VMD Based Modified Multi-View Neural Network for Long-Term Load Forecasting	Abhishek Sharma (IITDM Jabalpur,)	Abhishek Sharma (IITDM Jabalpur, )
3.	1570795602	PMU Data Based Phase Angle Monitoring Using OSI-PI for Situational Awareness	Aditya Ullas (Veer mata Jijabai Technological Institute (VJTI), India)	Aditya Ullas (Veer mata Jijabai Technological Institute (VJTI), India)
4.	1570795787	Influence of DC Voltage and Frequency Droop on Active Power Support Capability in Dual-Droop Controlled VSC-MTDC-Based AC-DC Grid	Ashima Taneja (Delhi Technological University, India)	Ashima Taneja (Delhi Technological University, India)
5.	1570797572	Heuristic Approach Based EMS for Effective Power Sharing in HESS of Electric Vehicle	Alok Ranjan (Shri Ramdeobaba College of Engineering and Management, India)	Alok Ranjan (Shri Ramdeobaba College of Engineering and Management, India)
6.	1570798934	Electrical Fault Detection and Analysis Arduino-Based Preventive Device for Household Appliances	Morgan Louise C. Bacabac (Mapua University, Philippines)	Tristan Jean D Garcia (Mapua University, Philippines)
7.	1570798935	Developing a Methodology for Reactive Power Planning in an Industrial Microgrid	Pronay Dey (Ahsanullah University of Science and Technology, Bangladesh)	Pronay Dey (Ahsanullah University of Science and Technology, Bangladesh)
8.	1570801274	Fast Terminal Sliding Mode Control for Low Voltage DC Microgrid to Mitigate the Effect of Pulse Power Load	Alan Sankar B, IIT Bhubneshwar	M V Satya Sai Chandra IIT Bhubneshwar
9.	1570801689	Performance Comparison and Thermal Analysis of Recently Introduced High Gain Converters	Yugal Kishor and R. Patel (National Institute of Technology Raipur, India)	Ramnarayan Patel (National Institute of Technology Raipur, India)

### TS 18: Renewable Energy Technologies

Sn.	Paper ID	Paper Title	Corresponding Author	Registered Author
1.	1570787630	Study of Turning CO <sub>2</sub> into Fuel by Underground Coal Gasification in a Sustainable and Eco-Friendly Way	Pretty Mitra (Military Institute of Science and Technology, Bangladesh)	Pretty Mitra (Military Institute of Science and Technology, Bangladesh)
2.	1570787948	CVD Growth of Tin Selenide Thin Films for Optoelectronic Applications	Shivam Tyagi (IISER Trivandrum, India)	Shivam Singh (IISER Trivandrum, India)
3.	1570788064	An Improved PSO-Fuzzy Logic Control Based PV Power System	Neeraj Priyadarshi (MIT PURNEA, India)	Neeraj Priyadarshi (MIT PURNEA, India)
4.	1570788378	Performance Evaluation of Proton Exchange Membrane Fuel Cell with Reformer	Nitin Chafekar (Research & Development Establishment (Engrs.), India)	Nitin Chafekar (Research & Development Establishment (Engrs.), India)
5.	1570788933	Carrier Quantization Effect and Defect Disparity in CZTS/CZTSSe Kesterite Solar Cell	Dr. Soumyaranjan Routray (SRM Institute of Science and Technology, India)	Chandrasekar Palanisamy (SRM Institute of Science and Technology, India)
6.	1570789001	Understanding the Effect of Interface Trap States on Electrical and Optical Performance of CFTS Thin Film Solar Cell	Shibi Varku (Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, India)	Shibi Varku (Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, India)
7.	1570789008	Investigation on Electrical and Optical Properties of Cu <sub>2</sub> FeSnSe <sub>4</sub> (CFTSe) Based Thin Film Solar Cell for Terrestrial Applications	Marikanti Aravind (Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, India)	Dr. K P Pradhan (Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, India)

**TS 19: Renewable Energy Technologies**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570791037	Gravitational Water Vortex Power Source with Improved Power Output for Battery Charging Station	Onofre E Algara (Mapua University, Philippines)	ONOFRE E. ALGARA JR. (Mapua University, Philippines)
2.	1570793602	Overhead Transmission Line Fault Characterization Using Multilayer Perceptron Neural Network	Sazzed Mahamud Khan (American International University-Bangladesh, Bangladesh)	Erphan Ahammad Bhuiyan (Rajshahi University of Engineering & Technology)
3.	1570794643	Solar Irradiance Forecasting Using Recurrent Neural Networks	Dhanush Shekar (National Institute of Technology Karnataka, India)	Dhanush Shekar (National Institute of Technology Karnataka, India)
4.	1570795577	A Techno-Economic Analysis of Bifacial Panels Under Soiling in South-Asian Urban Area	Mohammad Didarul Islam (Military Institute of Science and Technology & Khan SLR Group, Bangladesh)	Mohammad Didarul Islam (Military Institute of Science and Technology & Khan SLR Group, Bangladesh)
5.	1570798895	Estimation of the Small Wind Turbine Potential in Tamil Nadu Using Geospatial Data	Vaisakh Suresh Kumar (World Resources Institute India, India)	Vaisakh Suresh Kumar (World Resources Institute India, India)
6.	1570799022	EFog-IoT: Harnessing Power Consumption in Fog-Assisted of Things	Abhijeet Mahapatra (Veer Surendra Sai University of Technology, India)	ABHIJEET MAHAPATRA, Dr. SANTOSH KUMAR MAJHI (Veer Surendra Sai University of Technology, India), KAUSHIK MISHRA (SAMBALPUR UNIVERSITY INSTITUTE OF INFORMATION TECHNOLOGY)
7.	1570799286	Holistic Perusal of Expansion of Carbon Capture Technologies with Its Global Prospective	Chaitanya Yogi (Panjab University, India)	Chaitanya Yogi (Panjab University, India)

**TS 20: Sensors and IoT Applications in Health and Agriculture**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570789015	PUF Based Authentication and Key Sharing Protocol for Smart Water Monitoring System	Sourav Roy (National Institute of Technology Durgapur, India)	Sourav Roy (National Institute of Technology Durgapur, India)
2.	1570789048	Crop Stress Assessment in Cotton with Granular Ambient and Crowd sensed Farm Data	Prachin Jain (Tata Consultancy Services, India)	Prachin Jain (Tata Consultancy Services, India)
3.	1570789224	Forecasting of Fires Hotspot in Tropical Region Using LSTM Algorithm Based on Satellite Data	Evizal Abdul Kadir (Universitas Islam Riau, Indonesia)	Evizal Abdul Kadir (Universitas Islam Riau, Indonesia)
4.	1570789296	A Fuzzy Logic Approach for the Determination of Carabao Mango Ripeness Level and Shelf Life	Christian James Encio (Mapua University, Philippines)	Christian James Y. Encio, Marvin S. Toco (Mapua University, Philippines)
5.	1570789321	Assessing Impact of Carbon-Smart Farming Practices in Rice with Mobile Crowdsensing	Rushikesh Dattatraya Kulat (Tata Consultancy Services, India)	Rushikesh Dattatraya Kulat (Tata Consultancy Services, India)
6.	1570792617	Practical Considerations and Performance Evaluation of an Offset Elimination Scheme for Half-Bridge TMR Angle Sensor	Kishor Bhaskarrao Nandapurkar (Indian Institute of Technology, Indian School of Mines Dhanbad, India)	Kishor Bhaskarrao Nandapurkar (Indian Institute of Technology, Indian School of Mines Dhanbad, India)
7.	1570793016	Addressing DAO Insider Attacks in IPv6-Based Low-Power and Lossy Networks	Sachin Verma (PDPM IIITDM, JABALPUR, India)	Sachin Verma (PDPM IIITDM, JABALPUR, India)
8.	1570794136	Oyster Mushroom Cultivation Monitoring and Control with Size Quality Prediction Algorithm via Adaptive Neuro-Fuzzy Inference System (ANFIS)	Glenn C. Virrey (Mapua University, Philippines)	Glenn C. Virrey (Mapua University, Philippines)

**TS 21: Sensors and IoT Applications in Health and Agriculture**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570795091	tCrop: Thermal Imaging Based Plant Stress Identification Using On-Edge Deep Learning	Ritik Bompilwar (International Institute of Information Technology - Naya Raipur, India))	Surya Rathor (IIIT Naya Raipur)
2.	1570795116	Estimation of Plucking Points with Overhead Imaging in Tea - A Case Study	Sanket Junagade (Tata Consultancy Services, India)	Sanket Kailas Junagade (Tata Consultancy Services, India)
3.	1570795417	Efficient Trajectory Planning and Route Adjustment Strategy for Mobile Sink in WSN-Assisted IoT	Anjula Mehto (Madhav Institute of Technology & Science Gwalior, India)	Dr Shubhra Jain (Thapar Institute of Engineering and Technology Patiala)
4.	1570797449	Sixth Generation (6G) Wireless Technology: An Overview, Vision, Challenges and Use Cases	Jasneet Kaur (Charles Sturt University, Australia)	Jasneet Kaur (Charles Sturt University, Australia)
5.	1570798432	Exploring Skin Conductance Features for Cross-Subject Emotion Recognition	Debatri Chatterjee (TCS Innovation Lab, India)	Debatri Chatterjee (TCS Innovation Lab, India)



**TS 22: Sensors and IoT Applications in Health and Agriculture**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570798754	Fiber Bragg Grating Based Temperature Sensor for Tissue Thermometry During Hyperthermia: A Simulation Study	Hemanth Kumar Dontiboina (Indian Institute of Technology Madras, India)	Hemanth Kumar Dontiboina (Indian Institute of Technology Madras, India)
2.	1570798916	Implementation of Smart Greenhouse System with Mobile Application for Vegetative Plants in Urban Environment Setting	Angela Rica D Mallari (Mapua University, Philippines)	Angela Rica Mallari, Celeste Mae T. Tabanera (Mapua University, Philippines)
3.	1570798924	Distance and Temperature Self-Monitoring Device Using Radio Frequency (RF) for COVID-19 Safety	Gaille Anne R. Bordonada (Mapua University, Philippines)	Gaille Anne Bordonada, Aldous Vernon Roseus (Mapua University, Philippines)
4.	1570799062	Does Green Tea Have Any Effect on Human Body? - A Signal Processing Based Study	Tasmina Imam (North South University, Bangladesh)	Tasnim Nishat Islam (Bangladesh University of Engineering and Technology)
5.	1570799093	Improved Resistance to Digital Converter for Low-Value Resistive Sensor with Lead Wire Compensation	Dr. Shiraz Sohail (National Institute of Technology (NIT) Tiruchirappalli, India)	Gopal Singh (National Institute of Technology (NIT) Tiruchirappalli, India)
6.	1570799341	Recognition of Human Activity from ECG and IMU Signals Using Deep Learning Networks	Sakorn Mekruksavanich (University of Phayao, Thailand)	Sakorn Mekruksavanich (University of Phayao, Thailand)
7.	1570801471	SpO2 and Temperature Controlled Smart Door System to Limit Covid Contagion	Omkar Prakash Kapade (NMIMS Mukesh Patel School of Technology Management & Engineering & N/A, India)	Omkar Prakash Kapade (NMIMS Mukesh Patel School of Technology Management & Engineering & N/A, India), Meera Prakash Kapade (BITS PILANI)
8.	1570801660	An Optimal Multi-UAV Deployment Model for UAV-Assisted Smart Farming	Shavbo Salehi (Urmia University, Iran)	Jahan Hassan (Central Queensland University, Australia)

**TS 23: Signal, Image and Video Processing**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570788575	Performance Evaluation of the DEMON Processor for Sonar	Deepa Bhargavi (Naval Physical and Oceanographic Laboratory)	Deepa Bhargavi (Naval Physical and Oceanographic Laboratory)
2.	1570788960	ODNet: Optimized Deep Convolutional Neural Network for Classification of Solanum Tuberosum Leaves Diseases	D N Kiran Pandiri (National Institute of Technology Silchar, India)	D N Kiran Pandiri (National Institute of Technology Silchar, India)
3.	1570789097	Automatic Image Colorization Using Ensemble of Deep Convolutional Neural Networks	Urvi Oza (Dhirubhai Amabni Institute of Information and Communication Technology, India)	Urvi Oza (Dhirubhai Amabni Institute of Information and Communication Technology, India)
4.	1570789271	A Novel Partitioning Approach for Multimodal Brain Tumor Segmentation for Federated Learning	Ashish Phophalia (Indian Institute of Information Technology Vadodara, India)	Ashish Phophalia (Indian Institute of Information Technology Vadodara, India)
5.	1570789348	Optimised Algorithm for Step Count Estimation Using Sensor Data from Smartphones and Wearables	Apratim Shrivastav (Delhi Technological University, India)	Utkarsh Kuchhal (Delhi Technological University, India)

**TS 24: Signal, Image and Video Processing**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570789389	Satellite Remote Sensing for Stand Age Estimation in Tree Plantations: A Case Study Using Landsat Images and Machine Learning Algorithms	Rachelle Soliman (Caraga State University, Philippines)	Jojene Santillan (Caraga State University, Philippines)
2.	1570789417	Task Based Representation of fMRI Signals Using Spatiotemporal Characterization	Aritra Chakraborty (Jadavpur University, India)	Aniruddha Sinha (TCS Research, Tata Consultancy Services Ltd.)
3.	1570794061	Deep Sequence-To-Point Learning for Electric Appliance Energy Disaggregation in Smart Building	Suryalok Dash (Indian Institute of Technology-Bhubaneswar & Parala Maharaja Engineering College-Berhampur, India)	Suryalok Dash (Indian Institute of Technology-Bhubaneswar & Parala Maharaja Engineering College-Berhampur, India)
4.	1570794445	Rate and Outage Analysis of Cellular User Assisted Full-Duplex Multicarrier Device-To-Device System	Advait Nerlikar (BITS Pilani k k Birla Goa Campus, India)	Advait Jitendra Nerlikar (BITS Pilani k k Birla Goa Campus, India)
5.	1570794815	Hardware Co-Simulation of an Efficient Adaptive Filter Based ECG Denoising System with Inbuilt Reference Generator	Radhika Mathuria (Sardar Vallabhbhai National Institute of Technology, India)	Anand Darji (Sardar Vallabhbhai National Institute of Technology, India)
6.	1570794816	Resource Efficient Implementation of Joint Timing and Large Carrier Frequency Offset Estimation Scheme for Low Data Rate Applications	Nitin Tandon (Defence Electronics Application LAB, India)	Nitin Tandon (Defence Electronics Application LAB, India)
7.	1570795202	Investigation on Inter- and Intra-Class Ambiguity Between Handwritten Case-Sensitive Characters Using Customized MobileNetv2	Naragoni Saidulu (NIT Silchar, India)	Naragoni Saidulu (NIT Silchar, India)

**TS 25: Signal, Image and Video Processing**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570795274	A Novel Convolution Neural Network Model for Wafer Map Defect Patterns Classification	Soumen Biswas (HCL Technologies Ltd., India)	Soumen Biswas (HCL Technologies Ltd., India)
2.	1570795362	Multi-Stream Multi-Attention Deep Neural Network for Context-Aware Human Action Recognition	Rashmi M (National Institute of Technology Karnataka (NITK))	Rashmi M (National Institute of Technology Karnataka (NITK))
3.	1570795402	Intensity Estimation of Tropical Cyclone Using Different Satellite Imagery and Random Forest Classifier	Chinmoy Kar (Sikkim Manipal Institute of Technology, India)	Chinmoy Kar (Sikkim Manipal Institute of Technology, India)
4.	1570795405	Computer Vision Based Visual Activity Classification Through Deep Learning Approaches	Dushyant Kumar Singh (MNNIT Allahabad, India)	Dushyant Kumar Singh (MNNIT Allahabad, India)
5.	1570795465	A Methodological Survey on Fake Data Generation in Multimedia Forensics	Santanu Das (Tripura University, India)	Santanu Das (Tripura University, India)
6.	1570795630	A Transfer-Learning Based Ensemble Architecture for ECG Signal Classification	Tareque Bashir Ovi (Military Institute of Science and Technology, Bangladesh)	Sauda Suara Naba (Military Institute of Science and Technology, Bangladesh)
7.	1570796182	Deep Learning Method for Agriculture Monitoring Under Adaptive Environment Using UAV-Based Aerial Images	Indrajit Kalita (Indian Institute of Information Technology Guwahati, India)	Indrajit Kalita (Indian Institute of Information Technology Guwahati, India)
8.	1570796472	Fake News Detection in Hindi Using Embedding Techniques	Pasi Shailendra (National Institute of Technology Karnataka Surathkal, India)	Pasi Shailendra (National Institute of Technology Karnataka Surathkal, India)

**TS 26: Signal, Image and Video Processing**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570797028	Eye Detection Using Faster-RCNN	Naseem Ahmad (NIT Silchar, Assam, India)	Naseem Ahmad (NIT Silchar, Assam, India)
2.	1570798536	Classification of Cacao Beans Based on Their External Physical Features Using Convolutional Neural Network	Carlos Hortinela IV (Mapua Institute of Technology, Philippines)	Kathleen Tupas (Mapua Institute of Technology, Philippines)
3.	1570798691	Overview of Image Inpainting Techniques: A Survey	Riya Shah (Indian Institute of Information Technology Allahabad, India)	Dr. Anjali Gautam (Indian Institute of Information Technology Allahabad, India)
4.	1570798750	A-UNET: Attention 3D UNET Architecture for Multiclass Segmentation of Brain Tumor	Sunita Agarwala (Makaut, West Bengal, India)	B UMA SHANKAR (INDIAN STATISTICAL INSTITUTE)
5.	1570798878	Patient-Specific Model Generation Using Multiview 3D Reconstruction for Hyperthermia Treatment Planning	Malkuchi Anirudh (Indian Institute of Technology Madras, India)	Mudavath Baburam, Malkuchi Anirudh (Indian Institute of Technology Madras, India)
6.	1570798984	Sensor Fusion in Autonomous Vehicle Using LiDAR and Camera Sensor with Odometry	Diptadip Das (National Institute of Technology Silchar, India)	Diptadip Das (National Institute of Technology Silchar, India)
7.	1570798826	Stacked BiLSTM with ResNet50 for Medical Image Classification	Sudeshna Pattanaik	Sudeshna Pattanaik

**TS 27: Signal, Image and Video Processing**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Corresponding Author</b>	<b>Registered Author</b>
1.	1570798990	Classification of Sleep Apnea Event Type Using Imbalanced Labelled EEG Signal	Arnab Chatterjee (National Institute of Technology Durgapur, India)	Arnab Chatterjee (National Institute of Technology Durgapur, India)
2.	1570799045	Spatial Light Modulation Pattern Generation by Golomb Code for Single Pixel Imaging	Ayush Raju Balpande (Shri RCEM India)	Richa R. Khandelwal (Shri RCEM India)
3.	1570799080	Semantic Segmentation of Satellite Images Using Modified U-Net	Dhanishtha Patil (Ramrao Adik Institute of Technology, India)	Dhanishtha Patil (Ramrao Adik Institute of Technology, India)
4.	1570799092	A Siamese Based One Shot Learning Network with a Watermark Enhancement Technique for Historical Watermark Recognition	Sawradip Saha (Bangladesh University of Engineering and Technology, Bangladesh)	Sawradip Saha (Bangladesh University of Engineering and Technology, Bangladesh)
5.	1570799107	RIMNet: Image Magnification Network with Residual Block for Retinal Blood Vessel Segmentation	Farhana Sultana (University of Gour Banga, India)	Farhana Sultana (University of Gour Banga, India)
6.	1570799116	Development of Object Tracking System Utilizing Camera Movement and Deep Neural Network	Tejonidhi R. Deshpande (Walchand College of Engineering, Sangli)	Tejonidhi R. Deshpande (Walchand College of Engineering, Sangli)
7.	1570799129	Automatic Diabetic Retinopathy Detection Using Random Forest Classifier	Aurongo Mohammad Nasir (Bangladesh)	Sabyasachi Chakraborty Shrestha (Bangladesh University of Engineering and Technology)
8.	1570799148	Design and Development of a Raspberry Pi-Based Shopping Cart Following Robot Through Computer Vision and Object Tracking Method	Novie Dave Beltis Perez (Mapua University & Caraga State University Cabadbaran City, Philippines)	Novie Dave Beltis Perez (Mapua University & Caraga State University Cabadbaran City, Philippines)

### TS 28: Signal, Image and Video Processing

Sn.	Paper ID	Paper Title	Corresponding Author	Registered Author
1.	1570799397	Cross Domain Features for Subject-Independent Stress Detection	Radhika K (Amrita Vishwa Vidyapeetham, India)	Radhika K (Amrita Vishwa Vidyapeetham, India)
2.	1570800333	SignEnd: An Indian Sign Language Assistant	Leafia Dias (University of Mumbai, India)	Leafia Dias, Krunal Doshi, Anviksha Dixit, Ketaki Keluskar, (University of Mumbai, India)
3.	1570800500	Phoneme Classification Using Modulating Features	Mohan Bansal (VIT-AP University, India)	Mohan Bansal (VIT-AP University, India)
4.	1570800563	SplitGlass: A Splitting Based Deep Network for Efficient Human Pose Estimation	Harsh Ashokkumar Patel (Ahmedabad University, India)	Professor Dhaval Patel, Harsh Ashokkumar Patel (Ahmedabad University, India)
5.	1570800570	EMED-UNet: An Efficient Multi-Encoder-Decoder Based UNet for Chest X-Ray Segmentation	Kashish Dineshbhai Shah (Ahmedabad University, India)	Professor Dhaval Patel, Kashish Dineshbhai Shah (Ahmedabad University, India)
6.	1570801461	EEG Based Human Emotion Analysis	Aakanksha Garg (Sardar Patel Institute of Technology, India)	Akash Hake (Sardar Patel Institute of Technology, India)
7.	1570801470	Video Scene Searching Using Modified Bi-Modal Transformer	Siddhant Abhijit Raje (Don Bosco Institute of Technology, India)	Siddhant Abhijit Raje (Don Bosco Institute of Technology, India)
8.	1570801538	Optimum Proximal Fuel Station Indicator	Garv Jhangiani (University of Mumbai, India)	Garv Jhangiani (University of Mumbai, India)
9.	1570801562	Continuous American Sign Language Recognition Using Computer Vision and Deep Learning Technologies	Shalitha Senanayaka (Sri Lanka Institute of Information Technology, Sri Lanka)	Shalitha Senanayaka (Sri Lanka Institute of Information Technology, Sri Lanka)

### TS 29: Signal, Image and Video Processing

Sn.	Paper ID	Paper Title	Corresponding Author	Registered Author
1.	1570801625	A Fast Adaptive Algorithm for Sub-Pixel Motion Estimation	Rohan Mukherjee (Indian Institute of Management Bodh Gaya, India)	Amit Ram (Goa Institute of Management)
2.	1570801637	Blind Compressive Sensed Signal Reconstruction Using Householder Transforms	Veena Narayanan (National Institute of Technology, India)	Veena Narayanan (National Institute of Technology, India)
3.	1570801646	Computation-Efficient and Multiplierless Hardware Realization of Decimation in Time FFT	Sampad Chowdhury (Indian Institute of Engineering Science and Technology, Shibpur, India)	Sampad Chowdhury (Indian Institute of Engineering Science and Technology, Shibpur, India)
4.	1570801690	Mammogram Image Enhancement Using a Two-Threshold Model of Shadowed Set with Gradual Representation of Cardinality	Ankita Bose (GITAM University of Technology, India)	Ankita Bose (GITAM University of Technology, India)
5.	1570801705	Detecting Emotions from Human Speech: Role of Gender Information	Manish Gupta (Nirma University, India)	Tirth Patel (Nirma University, India)
6.	1570801711	EEG Spectral Correlates of Rapid and Deep Slow Breathing States and Classification Using ML	Siddesh Patnaik (Indian Institute of Technology Gandhinagar, India)	Siddesh Patnaik (Indian Institute of Technology Gandhinagar, India)
7.	1570801719	A Literature Survey of Face Recognition Under Different Occlusion Conditions	Manisha Kumari Meena (MNIT, India)	Manisha Kumari Meena (MNIT, India)
8.	1570799104	Sparsity Based Framework for Discrimination Between Confusion Pairs	Kakarla Rajesh (University of Hyderabad, India)	Kakarla Rajesh (University of Hyderabad, India)



## B. Technical Sessions Details for Virtual Poster Presentations

VP 1: Virtual Poster Presentation Group 1			
Sn.	Paper ID	Paper Title	Author Name
1.	1570789335	Performance Analysis of Spiking Neural Network Using Temporal Spike-Based Backpropagation on Field Programmable Gate Array (FPGA) Platform	Hakil Kim (INHA University)
2.	1570789096	A Smartphone Based Remote-Lab Cum Topic-Specific Learning Management System	Abhijit Poddar (Surendranath Evening College)
3.	1570797356	A Systematic Review on Various TeleHealth Techniques in Recent Times	Tanima Bhowmik (CALCUTTA INSTITUTE OF ENGINEERING & MANAGEMENT)
4.	1570798428	Recognition of Mustard Plant Diseases Based on Improved Deep Convolutional Neural Networks	Rashidul Hasan Hridoy (Daffodil International University)
5.	1570798478	IoT Based Monitoring Framework for a Novel Hydroponic Farm	IMTIAZ AHMED PRINCE (American International University - Bangladesh (AIUB))
6.	1570795560	Ensemble of Classifiers Based Soil Evaluation for Crop Cultivation	Mohammad Nurul Huda (United International University)
7.	1570796394	Can We Trust Health and Wellness Chatbot Going Mobile? Empirical Research Using TAM and HBM	Mugdha Kulkarni (Symbiosis Centre for Information Technology(SCIT), Symbiosis International (Deemed University) (SIU))
8.	1570798987	Deep Learning in Mining Business Intelligence	B M ANISUZZAMAN (United International University)
9.	1570798947	Statistical Prediction Application on the Enrollment Decline of the Electronics Engineering Program in the Philippines	Jandale Joaquin, John Lara (Mapua University, Philippines)

## VP 2: Virtual Poster Presentation Group 2

Sn.	Paper ID	Paper Title	Author Name
1.	1570801353	UVM Based Verification of Read and Write Transactions in AXI4-Lite Protocol	Hardi Sangani (Institute of Technology, Nirma University)
2.	1570795382	A Simplified Control Technique for a Z-Source PWM Rectifier	DEBALINA NANDA (IEST, Shibpur)
3.	1570789170	A Novel Green Building Energy Consumption Intensity: Study in Inalum Green Building	Ruliyanta (Universitas Nasional)
4.	1570798977	Implementation of an Energy Harvester Swing Embedded with Internet of Things (IoT) Monitoring Technology	Michael Pacis (Mapua University)
5.	1570801716	Enhanced Power System Flexibility Through Energy Storage - RoR Hydro Plant Integration	Rakesh Bohra (Graphic Era (Deemed to be University))
6.	1570802580	Improvement of Power Quality of Grid Interfaced WEGS System Using HRFOFFM Filter	Pooja Yadav (National Institute of Technology Uttrakhand)
7.	1570795462	Multilayer Pentagon Ring Dual-Band Microstrip Antenna for GPS Aided GEO Augmented Navigation Receivers	Sahana C (Amrita University)
8.	1570799085	Quad MIMO Antenna for UWB Applications	R. Prashant (Delhi Technological University)
9.	1570801398	Theoretical Approach on Analysis of Ridged Waveguide Properties Using Equivalent Transmission Line Circuit	Sulis Tyaningsih (Institut Teknologi Bandung)

## C. Technical Sessions Details for Physical Poster Presentations

PP 1: Physical Poster Presentation Group 1			
Sn.	Paper ID	Author Name	Paper Title
1.	1570788947	Object Detection Methods for Image-Based Visual Servoing of 6-DOF Industrial Robot	Megha G Krishnan (ASIET)
2.	1570788968	A Fast Moving Object Detection Technique Using QR Decomposition Based TV Regularized RPCA Framework	NEELESH SABAT (Department of Electrical Engineering, NIT Calicut, NIT Campus P.O 673 601, Kozhikode, India)
3.	1570795001	Automated 3D Patient Model Generation Using ML Technique for Hyperthermia Treatment Planning	Akhilesh Kumar Kashyap (IIT Madras)
4.	1570797474	Classifying Sleep-Wake States of Patients by Training on Single EEG or EOG Channel Data from Normal Subjects	RITIKA JAIN (INDIAN INSTITUTE OF SCIENCE BANGALORE)
5.	1570795353	Arranging Integer Numbers on a Loop Such That the Sum of Any Two Adjacent Numbers is a Perfect Square	Dr. Tejmal Rathore
6.	1570801700	Real-Time Sensing and NeuroFeedback for Practicing Meditation Using Simultaneous EEG and Eye Tracking	Shivam Chaudhary (Indian Institute of Technology Gandhinagar)
7.	1570797498	Hot Data Identification for Dynamic Workload Using Parallel Setup	Ami Pandat (DAIICT, Gandhinagae, India)
8.	1570789295	Edge Assisted Architecture for Performing Precision Agriculture	Viveka Vardhini Nelli (Aditya Institute of Technology and Management) BHARGAV SASALA (Aditya Institute of Technology and Management) NIHARIKA MAJJI (Aditya Institute of Technology and Management) Prameela Lingudu (Aditya Institute of Technology and Management)
9.	1570795023	Secure SDN Based IoT Network Through Blockchain for Smart Architectures	Manvi Jha (National Institute of Technology Patna)
10.	1570798945	Prognosis of Infection Spread Deploying Internet of Bio-Nano Things	Vedant Thakore (Ahmedabad University)

**PP 2: Physical Poster Presentation Group 2**

<b>Sn.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Author Name</b>
1.	1570784450	Analysis of Split Proof Mass Piezoelectric Cantilever Based MEMS Energy Harvesting System Using Ultra Low Power Rectifier Circuit	Dr Alok Naugarhiya (NIT Raipur)
2.	1570798674	Hardware Up-Gradation Plugin for Accelerating the Image Convolution Processing	Priyanka Bagul (Modern Education Society's College of Engineering, Pune)
			Pradeep Awasare (Anantrao Pawar College of Engineering and Research)
3.	1570799919	Area Efficient and Low Power Half Subtractor Using Transmission Gate CMOS Logic	Tripti Dua (Manipal University, Jaipur)
4.	1570788049	Effectiveness of Virtual Ground Technique on a Single Phase Full Bridge Voltage Source Inverter Using Unipolar and Bipolar Sinusoidal PWM	Mr. A Arjun (Rajagiri School of Engineering and Technology)
5.	1570801497	Automatic Attendance Marker Using Beacon Technology	Akash Hake (Sardar Patel Institute of Technology)
6.	1570798937	A Review of Phased-Array Receiver Architectures for 5G Communications	Ajinkya Kharalkar (Indian Institute of Technology Bombay)
7.	1570801739	Remote Sensing Based Crop Monitoring System	Vinit Gujarkar (Savitribai Phule Pune University)
			Arindam Pal (Savitribai Phule Pune University)
			Pooja Dilip Kulkarni (Savitribai Phule Pune University)
8.	1570795789	Sign Language Translation Using a Chrome Extension for Google Meet	Bhuvana Raisinghani (Vivekanand Education Society's Institute of Technology)
			Varun Bhat (Vivekanand Education Society's Institute of Technology)
			Manasee Ramchandra Parulekar (Vivekanand Education Society's Institute of Technology)